

ABSTRACT

5 Halftoning by error diffusion, enhanced so  
as to reduce the presence of structural artifacts in  
the halftoned output while avoiding an artificial  
increase in halftoning image noise. Specifically,  
error diffusion according to the invention divides  
the input gray level intensity range into different  
segments for purposes of both thresholding and error  
10 diffusion. Different error diffusion threshold  
masks are applied for each respective segment, and  
different error diffusion weights are applied for  
each respective segment, with a decision being made  
as to whether or not to apply a different threshold  
15 mask being based on the local image gradient.

E-17449

10025812-122601